5

## **CLAIMS**

## What is claimed is:

- 1. A method for estimating exportation time, for connecting an output/input interface of a manufacturer through a network to a system for estimating exportation time, wherein the system estimates product exportation time for client orders received by the output/input interface of the manufacturer according to practical operating conditions in product manufacture; the method comprising the steps of:
  - determining via the system if the output/input interface of the manufacturer submits a data uploading request, wherein if no uploading request is submitted, step (3) is followed; or else, the system receives manufacture associated data of client order data, material requirement data and stock record data that are uploaded by the manufacturer, and stores the uploaded data in a database of the system, and then step (2) is followed;
  - (2) processing data operation for the manufacture associated data of the client order data, the material requirement data and the stock record data, and storing operation data results of manufacture schedule data, order reply data, abnormal condition data and material insufficiency data in the database; then, the step (1) is followed;
  - (3) determining via the system if the manufacturer submits a data downloading request, wherein if the downloading request is submitted, step (4) is followed; or else, the step (1) is followed; and
  - (4) downloading operation data results from the database corresponding to the submitted request from the manufacturer, and transmitting the downloaded operation data results to the output/input interface of the manufacturer.
- 25 2. The method of claim 1, wherein the step (2) further comprises the steps of:
  - (2-1) retrieving the client order data from the database of the system for obtaining an

order date and an exportation date from the client order data, and retrieving the material requirement data and the stock record data for obtaining currently available resources;

- (2-2) determining via the system if a user sets a number of interval days between the order date and the exportation date according to the client order data, wherein if the number of interval days is not set by the user, then it is automatically set by the system;
- (2-3) determining via the system according to the client order data if the exportation date is larger than a sum of the order date and the number of interval days, wherein if the exportation date is larger, step (2-4) is followed; or else, step (2-5) is followed;
- (2-4) setting the obtained available resources from the material requirement data and the stock record data via the system to be in a reserve status, so as to make the available resources used in product manufacture for other client orders with their exportation dates being approached, or to allow an purchasing department to add up new orders for product manufacture; and establishing manufacture schedule data via the system for production lines to execute product manufacture according to order requirements, and generating order reply data so as to estimate precise product exportation time, wherein the manufacture schedule data and the order reply data are stored in the database; and
- (2-5) setting the obtained available resources from the material requirement data and the stock record data via the system to be in a usage status, so as to make the available resources used in product manufacture for the client order data with the exportation date determined to be smaller than the sum of the order date and the number of interval days; and constructing manufacture schedule data via the system for production lines to execute product manufacture so as to allow

10

THE RING WILL IN

H

F=1

15.

20

- 3. The method of claim 2, wherein the step (2-5) further comprises a step of: generating material insufficiency data via the system if the available resources are determined to be insufficient for product manufacture according to the client order data, and storing the material insufficiency data in the database, in the construction of the manufacture schedule data.
- 4. The method of claim 2, wherein the step (2-5) further comprises a step of: generating a record of abnormal condition data via the system corresponding to a request for deleting a record of client order data from the manufacturer received by the system, so as to allow the production lines to stop product manufacture according to the abnormal condition data.
- 5. The method of claim 1, wherein the system comprises:
  - a request input module for receiving the data uploading request or the data downloading request from the output/input interface of the manufacturer, and for generating a processing signal corresponding to the data uploading request or the data downloading request;
  - a control module for receiving the processing signal from the request input module, and for outputting a controlling signal according to the received processing signal, wherein the control module includes a storage interface, a schedule interface and a retrieval interface;
  - a first database for storing the manufacture associated data of the client order data, the material requirement data and the stock record data uploaded by the manufacturer; wherein if the control module receives the processing signal from the request input module corresponding to the data uploading request, it generates an uploading

controlling signal for prompting the storage interface to store the uploaded manufacture associated data in the first database, and generates an operation controlling signal for prompting the schedule interface to retrieve the uploaded data from the first database for data operation and processing;

5

a second database for storing operation data results of manufacture schedule data, order reply data, abnormal condition data and material insufficiency data produced by the control module; wherein if the control module receives the processing signal from the request input module corresponding to the data downloading request, it generates a downloading controlling signal for prompting the retrieval interface to retrieve the operation data results of the manufacture schedule data, the order reply data, the abnormal condition data and the material insufficiency data from the second database as desirably used as reference for product manufacture; and

an output control module for transmitting the retrieved data of the manufacture schedule data, the order reply data, the abnormal condition data and the material insufficiency data to the output/input interface of the manufacturer, so as to allow the manufacturer to be able to control product manufacture for exportation on time and monitor stock quantity in real time.

- 6. The method of claim 1, wherein the output/input interface is a terminal device.
- 7. The method of claim 5, wherein the system is established in a server.
- 8. A method for estimating exportation time, for connecting an output/input interface of a manufacturer through a network to a system for estimating exportation time, wherein the system estimates product exportation time for client orders received by the output/input interface of the manufacturer according to practical operating conditions in product manufacture; the method comprising the steps of:

25

(1) determining via the system if the output/input interface of the manufacturer submits a data uploading request, wherein if no uploading request is submitted,

- retrieving the client order data via the system from the database for obtaining an order date and an exportation date, and retrieving the material requirement data and the stock record data for obtaining currently available resources;
- (3) determining via the system if a user sets a number of interval days between the order date and the exportation date according to the client order data, wherein if the number of interval days is not set by the user, then it is automatically set by the system;
- determining via the system according to the client order data if the exportation date is larger than a sum of the order date and the number of interval days, wherein if the exportation date is larger, step (5) is followed; or else, step (6) is followed;
  - setting the obtained available resources from the material requirement data and the stock record data via the system to be in a reserve status, so as to make the available resources used in product manufacture for other client orders with their exportation dates being approached, or to allow an purchasing department to add up new orders for product manufacture; and establishing manufacture schedule data via the system for production lines to execute product manufacture according to order requirements, and generating order reply data so as to estimate precise product exportation time, wherein the manufacture schedule data and the order reply data are stored in the database; thereafter, the step (1) is followed;

1-0

15

20

(5)

25

- (6) setting the obtained available resources from the material requirement data and the stock record data via the system to be in a usage status, so as to make the available resources used in product manufacture for the client order data with the exportation date determined to be smaller than the sum of the order date and the number of interval days; and constructing manufacture schedule data via the system for production lines to execute product manufacture so as to allow products to be exported on time according to the client order data, and generating order reply data so as to estimate precise product exportation time, whereas the manufacture schedule data and the order reply data are stored in the database; thereafter, the step (1) is followed;
- (7) determining via the system if the manufacturer submits a data downloading request, wherein if the downloading request is submitted, step (8) is followed; or else, the step (1) is followed; and
- (8) downloading operation data results from the database corresponding to the submitted request from the manufacturer, and transmitting the downloaded operation data results to the output/input interface of the manufacturer.
- 9. The method of claim 8, wherein the step (6) further comprises a step of: generating material insufficiency data via the system if the available resources are determined to be insufficient for product manufacture according to the client order data, and storing the material insufficiency data in the database, in the construction of the manufacture schedule data.
- 10. The method of claim 8, wherein the step (6) further comprises a step of: generating a record of abnormal condition data via the system corresponding to a request for deleting a record of client order data from the manufacturer received by the system, so as to allow the production lines to stop product manufacture according to the abnormal condition data.

- 11. The method of claim 8, wherein the output/input interface is a terminal device.
- 12. The method of claim 8, wherein the system is established in a server.
- 13. A system for estimating exportation time comprising:

a request input module for receiving the data uploading request or the data downloading request from the output/input interface of the manufacturer, and for generating a processing signal corresponding to the data uploading request or the data downloading request;

a control module for receiving the processing signal from the request input module, and for outputting a controlling signal according to the received processing signal, wherein the control module includes a storage interface, a schedule interface and a retrieval interface;

a first database for storing the manufacture associated data of the client order data, the material requirement data and the stock record data uploaded by the manufacturer; wherein if the control module receives the processing signal from the request input module corresponding to the data uploading request, it generates an uploading controlling signal for prompting the storage interface to store the uploaded manufacture associated data in the first database, and generates an operation controlling signal for prompting the schedule interface to retrieve the uploaded data from the first database for data operation and processing;

a second database for storing operation data results of manufacture schedule data, order reply data, abnormal condition data and material insufficiency data produced by the control module; wherein if the control module receives the processing signal from the request input module corresponding to the data downloading request, it generates a downloading controlling signal for prompting the retrieval interface to retrieve the operation data results of the manufacture schedule data, the order reply data, the

10

T.

20

25

abnormal condition data and the material insufficiency data from the second database as desirably used as reference for product manufacture; and

an output control module for transmitting the retrieved data of the manufacture schedule data, the order reply data, the abnormal condition data and the material insufficiency data to the output/input interface of the manufacturer, so as to allow the manufacturer to be able to control product manufacture for exportation on time and monitor stock quantity in real time.

- 14. The system of claim 13, wherein the output/input interface is a terminal device.
- 15. The system of claim 13, wherein the system is established in a server.
- 16. The system of claim 13, wherein if the control module generates an operation controlling signal for prompting the schedule interface to retrieve the uploaded data from the first database for data operation and processing, the data operation is performed by processing the material requirement data and the stock record data with currently-received client order data; if the schedule interface obtains an order date and a number of interval days according to the client order data, and determines that an exportation date is larger than a sum of the order date and the number of interval days, currently available resources of stocks of manufactured or semi-manufactured products are obtained according to the material requirement data and the stock record data, and set to be in a reserve status, so as to make the available resources used in product manufacture for other client orders with their exportation dates being approached, or to allow an purchasing department to add up new orders for product manufacture and well adjust a manufacture schedule in sufficient time.
- 17. The system of claim 16, wherein if the schedule interface determines that the exportation date is smaller than the sum of the order date and the number of interval days, the currently available resources are set to be in a usage status, so as to construct manufacture schedule data for production lines to execute product manufacture for

- 18. The system of claim 16, wherein if the schedule interface receives a request for deleting a record of client order data from the manufacturer, it generates a record of abnormal condition data corresponding to the deleted client order data, so as to allow the production lines to stop product manufacture according to the abnormal condition data.
- 19. The system of claim 16, wherein the number of interval days is referred to a number of days between the order date and the exportation date, and is set as inputted by the manufacturer or automatically set by the schedule interface.